

1 E. BREEN ARNTZ, ESQ.
2 Nevada Bar No. 3453
3 THE LAW OFFICE OF KAREN H. ROSS
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5 Henderson, Nevada 89074
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8 breenarntz@me.com
9 *Attorney for Plaintiff*

IN UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEVADA

MIRELYS JIMENEZ, an individual, Case No.:

11 Plaintiff,

VS.

12 || UNITED STATES OF AMERICA

14 Defendant.

15 COMES NOW Plaintiff MIRELYS JIMENEZ, individually, by and through her
16 attorney of record, E. BREEN ARNTZ, ESQ., of THE LAW OFFICE OF KAREN H.
17 ROSS, for her Complaint against Defendant, alleges as follows:

I

PARTIES

20 1. Plaintiff, Mirelys Jimenez, was at all relevant times herein a resident
21 of Clark County, Nevada.

22 2. Defendant, the United States of America, may be served by delivering
23 a copy of the Summons and Complaint to the United States Attorney for the District
24 of Nevada.

26 3. Upon information and belief, at all times relevant hereto, the UNITED
27 STATES OF AMERICA, through its agent, the UNITED STATES DEPARTMENT
28 OF VETERAN AFFAIRS (“USDVA”), is an appropriate defendant under the Federal
Tort Claims Act.

4. Upon information and belief, at all times relevant hereto, DR. KYLE T. ROBINSON, M.D., during all time periods relevant to this Complaint, was a healthcare provider practicing medicine with the USDVA, was an employee of Defendant and acting within the scope of his employment.

5. Upon information and belief, at all times relevant hereto, DR. KYLE T. ROBINSON, M.D. was an employee of Defendant UNITED STATES OF AMERICA'S agent, the USDVA, and Defendant is vicariously liable for the acts of the DR. KYLE T. ROBINSON, M.D. and/or its employees. Defendant UNITED STATES OF AMERICA, through its agent, the USDVA, has fully authorized, approved and ratified the conduct of DR. KYLE T. ROBINSON, M.D.

III.

JURISDICTION

6. This Federal District Court has subject matter jurisdiction over this lawsuit under U.S. Const., Art. 3 § 2, cl. 1, and 28 U.S.C. §1346(b), 2671-80, commonly known as the Federal Tort Claims Act, which vests exclusive subject - matter jurisdiction of the Federal Tort Claims Act in Federal District Court.

7. Venue of this suit is proper herein because the acts, events, or omissions giving rise to these claims occurred in Las Vegas in the District of Nevada under 28 U.S.C. §1391.

III.

CONDITIONS PRECEDENT

8. Plaintiff pleads pursuant to 28 U.S.C. §2672 and 2675(a) that the claims set forth meet all jurisdictional requirements, including timely administrative presentment. Plaintiff timely presented these claims in writing to the Department of Veterans Affairs, Office of Chief Counsel, Torts Law Group, 810 Vermont Avenue, Washington, D.C. 20420.

9. The UNITED STATES OF AMERICA made a final disposition of this matter on October 25, 2021, in writing by certified mail.

10. Pursuant to 28 U.S.C. §2675(a), Plaintiff has complied with all jurisdictional requirements and conditions prior to the commencement and prosecution of this suit.

IV.

FACTS

11. Plaintiff realleges and incorporates herein by reference paragraphs 1-10 and all facts and allegations stated herein as though set forth fully herein.

12. Defendant, UNITED STATES OF AMERICA, operates health care facilities across the nation through the USDVA. Among the facilities that it operates is the VA Southern Nevada Healthcare System (“VASNHS”). In operating the VASNHS, Defendant holds itself out to military personnel, their members, families, retirees, and other who enter its facility to use that degree of care, skill, diligence, and attention used by hospitals generally in the local community in the care and treatment of patients. The facility operated by Defendant employs, among others, doctors, nurses, and other hospital personnel over which it exercises exclusive control and supervision, with the right to employ and discharge such employees.

13. At all time periods relevant to this Complaint, there existed between the physician identified herein and Plaintiff the relationship of physician-patient.

14. On July 6, 2017, Defendant, its employees, health care providers, and specifically DR. KYLE T. ROBINSON, M.D., deviated from, and fell below, acceptable standards of practice and care for Plaintiff, including, but not limited to, the failure to accurately categorize a lesion in the left breast as a BIRDS of 4 or 5 and recommend her for immediate biopsy.

15. That the breast ultrasound of July 6, 2017, revealed a large heterogenous lesion measuring up to almost 6 cm, with areas of taller-than-wide features, with prominent solid components and areas of lobulation, which was also described as solid by the ultrasound technologist per the tech worksheet, and which was quite amenable to biopsy located only a few millimeters beneath the skin

1 surface.

2 16. That the ultrasound report by radiologist KYLE T. ROBINSON, M.D.
3 suggested a BIRADS category of 3, suggesting probably benign findings.

4 17. That the incorrect diagnosis caused Plaintiff's undiagnosed cancer
5 continued to grow.

6 18. That the cancerous mass increased in size from 5.9 cm x 3.7 cm x 5.3
7 cm to 8 cm x 6 cm x 8 cm in eight weeks.

8 19. On July 6, 2017, the day of initial clinical presentation, the cancerous
9 mass would have been a Stage IIa metaplastic carcinoma, an aggressive form of
10 cancer.

11 20. That because the cancer was Stage IIa metaplastic carcinoma at that
12 time and went undiagnosed, the mass underwent approximately 3 doublings,
13 resulting in an upstaging of the cancer to Stage IIb metaplastic carcinoma.

14 21. That the overall ten-year survival rate for Stage IIa metaplastic
15 carcinoma compared to Stage IIb metaplastic carcinoma reduces from 55% to 45%.

16 22. That had Plaintiff received the correct diagnosis on July 6, 2017, she
17 more likely than not, would survive her breast cancer and be cured.

18 23. That ultimately on October 21, 2017, Plaintiff presented to Centennial
19 Hills Hospital Emergency Department with left breast pain and swelling due to
20 injury when Plaintiff's 21-month-old son, who weighed 30 pounds, was lying on her
21 side, and jumped onto her left breast, causing the mass to no longer be well defined
22 due to generalized edema throughout the entire breast that was tender to the touch.

23 24. That on October 27, 2017, Plaintiff underwent a partial mastectomy.

24 25. That on November 29, 2017, Plaintiff underwent neoadjuvant
25 chemotherapy.

26 26. That on March 2, 2018, Plaintiff underwent a total mastectomy with
27 implant removal.

28 27. That on July 31, 2018, Plaintiff underwent adjuvant chest wall
radiotherapy.

28. That amongst other things, Plaintiff presently suffers from lymphedema and other ailments associated with the condition and treatment of the Stage IIb metaplastic carcinoma.

V.

FIRST CAUSE OF ACTION
PROFESSIONAL NEGLIGENCE

29. Plaintiff realleges and incorporates herein by reference paragraphs 1-28 and all other facts and allegations of this Complaint as if fully set forth herein.

30. Defendant's employees and/or agents, including but not limited to KYLE T. ROBINSON, M.D., owed a duty to act in the same manner as an ordinarily prudent physician, in the same or similar circumstance in caring for, diagnosing and treating Plaintiff.

31. Defendant held itself and its employees and agents out to Plaintiff as providers of healthcare with the requisite training, experience and competent medical personnel to properly care for, diagnose and treat the Plaintiff.

32. Defendant, by and through its agents USDVA and VASNHS physicians, owed Plaintiff a duty to provide reasonable and ordinary medical care and treatment to her according to the applicable standard of care required of same or similar healthcare providers.

33. That the Defendant and its agents, including DR. KYLE T. ROBINSON, M.D., breached the standard of care, by among other things, not accurately categorizing a lesion in the left breast as a BIRDS of 4 or 5 and recommending her for immediate biopsy. (See the Affidavit of Merit, pursuant to NRS 41A.071 of Board-Certified Radiologist, Dr. Daniel Cousin, M.D., and Curriculum Vitae, **Ex. 1**).

34. Further, VASNHS, DR. KYLE T. ROBINSON, M.D. did not account for Plaintiff's strong family history of colon cancer, breast cancer and ovarian cancer or the physical appearance of the tumoral mass as hard and irregular upon

1 presentation on July 6, 2017, which is not consistent with the diagnosis of a
 2 galactocele and does not correlate clinically to the diagnosis of galactocele.
 3

4 35. As a result of all of the breaches in the standard of care, it is more likely
 5 than not that Plaintiff will not survive. (See the Affidavit of Merit, pursuant to NRS
 6 41A.071) of Board-Certified Pathologist, Dr. Sanford H. Barsky, M.D. and
 Curriculum Vitae, **Ex. 2**).

7 36. Plaintiff has suffered, among other things, severe pain, extreme
 8 suffering, severe emotional distress, mental anguish, lymphedema, depression, and
 9 anxiety.

10 37. As a result of the breaches of standard of care, Plaintiff incurred past
 11 and future medical expenses, past and future hospital expenses, past and future lost
 12 income. In an amount in excess of \$75,000.

13 38. It has become necessary for Plaintiff to retain the services of an
 14 attorney to prosecute this action, and Plaintiff is entitled to attorney's fees and costs
 15 of suit incurred herein.

17 **SECOND CAUSE OF ACTION**

18 **INTENTIONAL INFILCTION OF EMOTIONAL DISTRESS**

19 39. Plaintiff realleges and incorporates herein by reference paragraphs 1-
 20 38 and all other facts and allegations of this Complaint as if fully set forth herein.

21 40. The acts of the Defendant's employees, DR. KYLE T. ROBINSON,
 22 M.D., was extreme and outrageous and done with a reckless disregard for the rights
 23 of Plaintiff and/or were intended to cause the Plaintiff severe emotional distress and
 24 did, in fact, cause the Plaintiff severe emotional distress, proximately causing the
 25 damages and injuries alleged herein in a sum in excess of \$75,000.

26 41. It has become necessary for Plaintiff to retain the services of an
 27 attorney to prosecute this action, and Plaintiff is entitled to attorney's fees and costs
 28 of suit incurred herein.

1 WHEREFORE, Plaintiff respectfully requests that this Honorable Court
2 enter judgment in her favor and against Defendant, and award Plaintiff the
3 following:

4 a. Actual damages, general and special, in excess of \$75,000;
5 b. Costs of suit;
6 c. Pre-judgment and post-judgment interest, as provided by law;
7 d. All other relief the Court deems appropriate.

8 DATED this 25th day of April, 2022.

9 THE LAW OFFICE OF KAREN H. ROSS

11 /s/ E. Breen Arntz, Esq.

12 E. Breen Arntz, Esq.
13 Nevada Bar No. 3453
14 2275 Corporate Circle, Suite 160
15 Henderson, Nevada 89074
16 Phone: (702) 485-4152
17 Fax: (702) 485-4125
18 *Attorney for Plaintiff*

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EXHIBIT 1

AFFIDAVIT OF DANIEL COUSIN, M.D.

STATE OF FLORIDA)
) ss.
COUNTY OF ESCAMBIA)

I, DANIEL COUSIN, M.D., being first duly sworn, deposes and says as follows:

1. That this Affidavit is made pursuant to NRS 41A.071.
2. That I am a Board-Certified Radiologist Certified by both the American Board of Radiology and the National Board of Physicians and Surgeons.
3. That I am licensed to practice medicine in the State of Florida and State of New York.
4. That I completed my residency in Radiology at the Yale - Norwalk Hospital Program and the University of Florida Shands Hospital Program Gainesville.
5. That I am a graduate of Harvard University.
6. That I current serve as the Clinical Director at Bayview Radiology, a full-service outpatient imaging center with a focus on women's imaging, located in Tampa, Florida.
7. That I have served as a Medical Director, as a Program Director for a radiology residency, and in other clinical and administrative roles as delineated by my Curriculum Vitae.
8. That my Curriculum Vitae is attached hereto as Exhibit A.
9. That I have been asked to review the medical care and treatment provided to Mirelys Jimenez (hereafter "Mrs. Jimenez").
10. That I have reviewed radiology imaging materials as well as the medical records from 21st Century Oncology, Yogesh K. Patel, MD., Las Vegas Surgical Associates, LLP, Raja Medi, MD., Steinberg Diagnostic Imaging, Laxmi Iyer, MD., Hope Cancer Care of Nevada, Lymphatic Therapy Services, and the Veterans Administration.
11. That on July 6, 2017, Mrs. Jimenez sought treatment at the Veteran's Administration Hospital for an ill-defined breast mass that she felt while breastfeeding.
12. That Mrs. Jiminez was examined at the local Veterans Administration Hospital by several individuals who felt a large mass which was imaged by ultrasound and mammography and thought to be cystic and solid.

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1 13. That at that time, the mass was thought to be a galactocele (a cyst filled with milk),
2 related to her lactation.

3 14. That in fact a breast ultrasound of 7/6/2017 revealed a large heterogenous lesion
4 measuring up to almost 6 cm, with areas of taller-than-wide features, with prominent
5 solid components and areas of lobulation, which was also described as solid by the
6 ultrasound technologist per the tech worksheet, and which was quite amenable to
7 biopsy located only a few millimeters beneath the skin surface.

8 15. That a fine needle aspiration was not preformed to confirm or refute the diagnosis of
9 galactocele.

10 16. That the ultrasound report by radiologist, Kyle T. Robinson, M.D., suggested that a
11 BIRADS category of 3, suggesting probably benign findings.

12 17. That at the time of the visit Mrs. Jimenez's visit, there should have been sufficient
13 concern given the imaging findings that the mass could have represented breast cancer
14 and biopsy should have been suggested.

15 18. That instead, there was an 8-week delay before Mrs. Jimenez was told to return for a
16 follow up physical examination and imaging studies, the timing of the ultrasound-
17 guided biopsy and the time for the pathology report to be issued.

18 19. That at that time of the biopsy, the mass increased in size.

19 20. That on October 26, 2017, Mrs. Jimenez was diagnosed with breast cancer with a
20 specific mention and description of metaplastic carcinoma.

21 21. That on November 1, 2017, Mrs. Jimenez underwent a lumpectomy (partial
22 mastectomy) and sentinel lymph node biopsy.

23 22. That the pathology report indicated residual poorly differentiated carcinoma with a
24 surgically positive margin.

25 23. That breast cancers arising during pregnancy, in the post-partem or puerperium period,
26 while uncommon, are particularly aggressive and must be evaluated carefully with a
27 sense of urgency.

1 24. That Mrs. Jimenez delayed diagnosis could have been avoided had she received a
2 BIRADS of 4 or 5 and had she been recommended for biopsy at the time of the 7/6/2017
3 radiology service.

4 25. That this was not ordered or performed which allowed the cancer to grow for an eight-
5 week period.

6 26. That the radiologist's failure to accurately categorize the lesion as more worrisome than
7 just "probably benign" and the failure to recommend biopsy at the time of the
8 interpretation of the 7/6/2017 ultrasound instead of advocating for later work up –
9 constitutes a deviation from the standard of care for radiologists who practice
10 mammography.

11 27. That all of my opinions herein are to a reasonable degree of medical certainty. I hereby
12 reserve the right to supplement this Affidavit should additional information be
13 received.

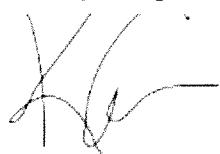
14 FURTHER YOUR AFFIANT SATETH NAUGHT.

15 Executed on this 25th date of April, 2022.



16
17
18
19 DANIEL COUSIN, M.D.
20
21

SUBSCRIBED AND SWORN to before me this
25th day of April, 2022.



22
23
24
25 NOTARY PUBLIC in and for the
Escambia of Clark, State of Florida.
26 My Commission Expires: January 07, 2023
27
28



Curriculum Vitae – Daniel Cousin, MD, DABR, DNBPAS

Cage: 8PS47 DUN: 021491772

ADDRESS:

304 Indian Trace #884
Weston, FL 33326

Phone: (646) 303-3125 (cell)
E-mail: cousin@post.harvard.edu

EDUCATION:

B.A.	Harvard University	2000
	<ul style="list-style-type: none">major: Cognitive Neuroscience (double honors major)graduated Magna Cum Laudeother academic scholarships and awards received: Mease Health Care Scholarship, Harvard College Scholarship, Soroptimist International Scholarship, David J. Hanson Award	
M.D.	Albert Einstein College of Medicine	2005

PROFESSIONAL EXPERIENCE:

Bayview Radiology, Tampa, FL (private outpatient imaging)	1/2016 – present
<ul style="list-style-type: none">Clinical DirectorDiagnostic RadiologistConsulting – various (medicolegal/medmal/personal injury/utilization/insurance IME, etc.) providing expert consultation and testimony for attorneys and organization both local and national.	
Radsurity, P.A., Delray Beach, FL	1/2013 – present
<ul style="list-style-type: none">PresidentMedical ConsultantConsulting – various (medicolegal/personal injury, utilization/insurance, etc.)Selected as “Top Doctor in Delray Beach, FL” by International Association of Radiologists (IAR), 2016Selected - 2016 Best of Delray Beach Awards for Radiologist.Selected as Top Doctor Award 2017	
DIA, Boca/Delray/Boynton, FL (private outpatient imaging)	1/2013 – 12/2015
<ul style="list-style-type: none">Medical DirectorLead radiologist	
Columbia / Harlem Hospital Center, New York, NY	7/2011 – 6/2012
Assistant Clinical Professor of Nuclear Radiology	
<ul style="list-style-type: none">Program Director of the Radiology Residency, 12/2011-4/2012Associate Program Director of the Radiology Residency, 9/2011-11/2011Physician Affiliate Group of New York local Governance Council, elected term 2011-12Residency Education Committee, member, 7/2011-6/2012Helpful in the successful ACR credentialing of Harlem's Nuclear Medicine Dept, 2011Teacher's Program Certificate, AUR course, San Antonio 2012	

Daniel Cousin, M.D.

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- Lecturer, 7/2011-6/2012
- Selected as Top Doctor by the IAR (International Association of Radiologists), 2013, spotlighted in renowned publication, *The Leading Physicians of the World*.

Columbia University / New York Presbyterian Hospital, New York, NY 7/2010 – 6/2011

Post Doctorate ACGME Clinical Fellowship in Whole Body Imaging, including PET-CT and Nuclear Radiology

- Chief Fellow
- Employee of the Month Award, selected for January 2011, Columbia University/NYPresb.
- Cardiac Imaging Mini-Fellowship (including training in Cardiac MRI and CTA)
- Guest Lecturer: Nuclear Medicine Advanced Course at Manhattan College
Medical Physics Graduate Student Course, Columbia University
Radiology Residency Boards Review, Columbia/NYP

University of Florida Shands Hospital, Gainesville, FL 5/2008 – 6/2010

Radiology Resident, R3 and R4

- Adjunct Professor, Center for the Arts in Healthcare, University of Florida
- Lecturer, School of Nursing, University of Florida
- Co-Treasurer, Florida Radiology Society, Residents & Fellow Section, 2008
- Ambassador, Resident Ambassador Program for incoming House Staff

Yale – Norwalk Hospital, Radiology Residency, New Haven – Norwalk, CT 7/2006 – 4/2008

Radiology Resident, R1 and R2

- Program Representative, House Officer Assembly, 2006 – 2008
- Interviewer, Resident Applicant Admissions Committee, 2008

Mount Sinai – Cabrini Medical Center, Internship in Internal Medicine, NYC 7/2005 – 6/2006

- Medical Intern

LICENSURES:

Florida – active since 2008
New York – active since 2010
Maine – 2013 – 2015, now inactive
CERTIFICATIONS: American Board of Radiology, 2011 – present
National Board of Physicians and Surgeons 2015 - present
ACLS/BCLS certified, 2005 – 2014

PROFESSIONAL AFFILIATION

Active member of:

- American College of Radiology, 2011- present
- AEPi Fraternity, Founding Father of Harvard University's chapter and active member of the alumni committee, 2000 - present

Previously a member of:

- Association of Program Directors in Radiology-committee member
- Association of University Radiologists
- Radiological Society of North America-annual convention attendee
- American Society of Emergency Radiology-elected as a T3 member
- Florida Radiology Business Management Association-meeting attendee
- American Medical Association- interim convention delegate
- American Roentgen Ray Society
- New York County Medical Society
- Florida Medical Association/Florida Radiology Society

PROJECTS/PRESENTATIONS/RESEARCH/OTHER AWARDS

- Weir I, Drescher F, Cousin D, Fraser E, Lee R, Berman L, Strauss E, Wang Y, Fine J. Trends in use and yield of chest computed tomography with angiography for diagnosis of pulmonary embolism in a CT hospital emergency department. Conn Med, 2010;74:5-9.
- D. Cousin, MD, J. Bauman, MD, A. Meinke, MD., Case Report: Cecal Herniation through the Foramen of Winslow, Diagnostic Imaging, September 2007, 9:14.
- Cousin MD, Jagait MD, Gilet MD, The Burden Factor: A novel, dynamic approach for identifying resident fatigue in radiology training programs, ARRS accepted, 4-2012.
- Cousin MD, Jagait MD, Gilet MD, The Burden Factor: A novel, dynamic approach for identifying resident fatigue in radiology training programs, abstract accepted at 89th Annual Meeting and Chapter Leadership / American College of Radiology Conference, 4-2012.
- Evaluation of collaborative factors and medico legal consideration in radiology and patient care UF Systems Based Project: Research Week 2009. University of Florida, project ongoing.
- Judge, Resident and Fellow Research Fair, Harlem Hospital, March 13, 2012
- Gerrard, MD, Cousin MD. Radiology to Go: Mobile Medical Radiology Applications – A Review and Analysis of Radiology Applications on Various Mobile Platforms, electronic exhibit, accepted RNSA 2012
- Gerrard, MD, Cousin MD. Radiology to Go: Mobile Medical Radiology Applications – A Review and Analysis of Radiology Applications on Various Mobile Platforms, oral presentation, accepted RNSA 2012
- Presenter, Society for Nuclear Medicine Annual Meeting, Miami, Continuing Education, 2012 "Review of NRC Regulations"
- Presenter, Society for Nuclear Medicine Annual Meeting, Miami, Current Problems, Controversies, and Techniques in Nuclear Medicine, 2012 "There Is No "I" in Nukes, but There Is a "You!"
- "In 3D, A New Powerful Medicolegal Tool," Daniel Cousin, M.D. Presentation, AALNC Conference, Clearwater Florida 4/14/2018.
- "Your case in 4D- A Powerful Diagnostic Tool" - Chapter Meeting Keynote Speaker, Case Management Society of America (CMSA), 1-10-2019
- "Walk the Walk, Don't Just Talk the Talk: The Truth About Your Case Merit" – Keynote Speaker, 21st Annual IARP (International Association of Rehabilitation Professionals) Southeast Florida W/ C Claims Conference (IARP), Sunrise, FL 11-8-2019
- "Spine Imaging and What Makes a Good Plaintiff or Defense Case." Speaker, Tampa Bay Trial Lawyers Association 7-11-2020
- "Radiology and Case Valuations in 4D" Speaker, Government Employees Insurance Company – South Florida Division 8-20-2020
- "New Approaches to Case Valuations using 4D Demonstrative Evidence," Lecture, State Farm FL Division 9-25-2020.
- Medilaw Physician of the Year Award 2020 and 2021.
- "Advanced Imaging Principles," Lecturer, Concorde Career Institute, 2-11-2021.
- "Neuroradiology for Auto Accidents" Lecturer, Geico Defense Counsel, 3-2-2021
- "Entrepreneur Series: Finding a Supervising/Collaborative Physician," Lecturer, PAVMT Virtual Medicine 3-4-2021
- "Demonstrative Evidence for Medico Imaging of Accidents." 6/4/2021, rubinfiorella.com,

Daniel Cousin, M.D.

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6/4/2021.

- “Neuroimaging 101 and Nothingburgers with Cheese: Alleged vs Actual injuries - and how to tell the difference. Lecture for Examworks offering CEUs for FL, TX, an DE 7-29-2021
- Neuroradiology and Nothingburgers with a Side of Fries, AAAM webinar 9-29-2021
- Interesting Cases In Radiology, Lecture for Concorde Ultrasound School 11-23-2021
- Radiology Imaging and Applications for Claims Management. Workers Compensation Webinar, AbsoluteDx, 3-16-2022
- “How Non-Radiologists Can evaluate for Legitimate vs Frivolous Claims Based on Imaging” SAE Accident Reconstruction Digital Summit, 3/20/2022

LANGUAGES:

- English
- Spanish (moderate fluency)

EXHIBIT 2

AFFIDAVIT OF SANFORD H. BARSKY, M.D.

STATE OF NEVADA)
) ss.
COUNTY OF CLARK)

I, SANFORD H. BARSKY, M.D., being first duly sworn, deposes and says as follows:

1. That this Affidavit is made pursuant to NRS 41A.071.
2. That I am a Board-Certified Pathologist Certified in Anatomical and Clinical Pathology.
3. That I am licensed to practice medicine in the State of Nevada and State of California.
4. That I completed my residency in Pathology at Harvard Medical School, Beth Israel Hospital, and research training at the National Cancer Institute.
5. That I am a graduate of the University of Pittsburgh School of Medicine and College of Arts and Sciences.
6. That I current serve as Executive Director of the Cancer Center and Institute for Personalized Medicine at the California University of Science and Medicine in Colton, California.
7. That I am a renowned breast pathologist and edited one of the leading authoritative texts in breast pathology, entitled The Breast.
8. That I have held professional positions in Academic Pathology at leading clinical and research institutions over the past forty (40) years which include the National Cancer Institute, the University of California, Los Angeles, Ohio State University, the University of Nevada, the Nevada Cancer Institute and Roseman University of Health Sciences.
9. That my Curriculum Vitae is attached hereto as Exhibit A.
10. That I have been asked to review the medical care and treatment provided to Mirelys Jimenez (hereafter “Mrs. Jimenez”).
11. That I have reviewed medical records from 21st Century Oncology, Yogesh K. Patel, MD., Las Vegas Surgical Associates, LLP, Raja Medi, MD., Steinberg Diagnostic

1 Imaging, Laxmi Iyer, MD., Hope Cancer Care of Nevada, Lymphatic Therapy
2 Services, and the Veterans Administration.

3 12. That on July 6, 2017, Mrs. Jimenez sought treatment at the Veteran's Administration
4 Hospital for an ill-defined breast mass that she felt while breastfeeding.

5 13. That Mrs. Jimenez was examined at the local Veterans Administration Hospital by
6 several individuals who felt a relatively large mass (5.9 cm x 3.7 cm x 5.3 cm in size)
7 which was imaged by ultrasound and mammography and thought to be cystic and solid.

8 14. That at that time, the mass was thought to be a galactocele (a cyst filled with milk),
9 related to her lactation.

10 15. That a fine needle aspiration was not preformed to confirm or refute the diagnosis of
11 galactocele.

12 16. That instead, there was an 8-week delay before Mrs. Jimenez was told to return for a
13 follow up physical examination and imaging studies, the timing of the ultrasound-
14 guided biopsy and the time for the pathology report to be issued.

15 17. That at the time of the visit Mrs. Jimenez's return visit, the concern that the mass
16 represented breast cancer was considerably raised which led to biopsy.

17 18. That at that time of the biopsy, the mass increased to 8 cm x 8 cm in size.

18 19. That on October 26, 2017, Mrs. Jimenez was diagnosed with breast cancer with a
19 specific mention and description of metaplastic carcinoma.

20 20. That on November 1, 2017, Mrs. Jimenez underwent a lumpectomy (partial
21 mastectomy) and sentinel lymph node biopsy.

22 21. That the pathology report indicated residual poorly differentiated carcinoma with a
23 surgically positive margin. The main tumoral mass was measured in the lumpectomy
24 specimen as being 1.8 cm in size, but was also present in a detached tissue marginal
25 fragment, making its size considerably larger. Biomarkers performed indicated that this
26 cancer was triple negative (ER-neg; PR-neg; Her-2/neu-neg) with a very high Ki-67
27 index of 60%.

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- 1 22. That breast cancers arising during pregnancy, in the post-partem or puerperium period,
 2 while uncommon, are particularly aggressive and must be evaluated carefully with a
 3 sense of urgency.
- 4 23. That at the time of the initial clinical presentation of the mass, the cancer was slightly
 5 greater than 5 cm in size in greatest dimension and described as having a cystic
 6 component, which most likely would have accounted for at least 25% of the mass; the
 7 sentinel lymph node was negative thereby defining the stage of the cancer presented as
 8 T2, N0 or Stage IIa.
- 9 24. That over a period of 6 weeks the mass would have undergone approximately 3
 10 doublings which would account for a single doubling in size in each dimension.
- 11 25. That at the time of the core biopsy the tumor would have been predicted to be at least
 12 8 cm x 6 cm x 8 cm which is corroborated by its estimated size on follow-up imaging
 13 of 8 cm x 8 cm and indicates that the delay in diagnosis resulted in an upstaging of the
 14 cancer to a T3, N0 or a Stage IIb.
- 15 26. That the overall 10-year survival for Stage IIb breast cancer compared with Stage IIa
 16 breast cancer is 45 % v 55%.
- 17 27. That if Mrs. Jimenez received a timely diagnosis and timely therapy for metaplastic
 18 carcinoma at her earlier stage, she, more likely than not, would survive her breast
 19 cancer and be cured.
- 20 28. That the eight-week delay in diagnosis constitutes a gross deviation from the standard
 21 of care for metaplastic breast cancer by Mrs. Jimenez' healthcare providers at the
 22 Veterans Administration Hospital and made it more likely than not that Mrs. Jimenez
 23 will experience a relapse of her disease both in terms of local recurrence and distal
 24 metastasis and not survive.
- 25 29. That the conduct outlined in ¶30 constitutes gross malpractice, failing to meet the
 26 standard of care, done with a conscious indifference to the consequences from the delay
 27 in treatment and a disregard for and indifference to the safety and welfare of Mrs.
 28 Jiminez.

1 30. That Mrs. Jimenez delayed diagnosis could have been avoided had she received fine
2 needle aspiration cytology and or a biopsy performed by her healthcare providers at the
3 VA Hospital.
4 31. That the fine needle aspiration would have revealed milky contents if a galactocele.
5 32. That this was not ordered or performed which allowed the cancer to grow for an eight-
6 week period.
7 33. That all of my opinions herein are to a reasonable degree of medical certainty. I hereby
8 reserve the right to supplement this Affidavit should additional information be
9 received.

10 FURTHER YOUR AFFIANT SATETH NAUGHT.

11 Executed on this 22 date of April, 2022.

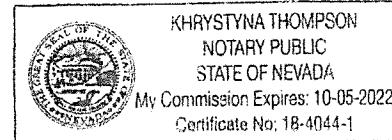

SANFORD H. BARSKY, M.D.

THE LAW OFFICE OF KAREN H. ROSS
2275 CORPORATE CIRCLE | SUITE 160
HENDERSON | NEVADA 89074
TEL: (702) 485-4152 | FAX: (702) 485-4125

15 SUBSCRIBED AND SWORN to before me this

16 22 day of April, 2022.

17 Kerry J
18 NOTARY PUBLIC in and for the
19 County of Clark, State of Nevada.
20 My Commission Expires: 10-05-2022



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CURRICULUM VITAE

Name: Sanford H. Barsky, M.D.

Home Address: 2606 Grassy Spring Place
Las Vegas, NV 89135-1604

Place of Birth: McKees Rocks, PA

Citizenship: United States

Education: B.S., University of Pittsburgh
M.D., University of Pittsburgh
School of Medicine

Contact Information: E-mail (work): barskys@cusm.org
E-mail (home): sbarsky@centurylink.net
Phone (office/fax): (909) 490-5032
Phone (cell): (702) 901-3916

Postdoctoral Training:

Internship and Residency

Intern in Medicine and Resident in Pathology,
Beth Israel Hospital, Harvard Medical School
Chief Resident, Pathology, Beth Israel Hospital, Harvard Medical School
Teaching Fellow, Harvard Medical School

Research Training

Research Staff Fellow, Laboratory of Pathology, National Cancer Institute,
National Institutes of Health (Laboratory of Lance A.
Liotta, M.D., Ph.D)

Sabbatical Training

Basic training in molecular biology
(Laboratory of Winston Salser, Ph.D., MBI, UCLA)

Board Certification: Anatomic and Clinical Pathology

Medical Licensures: Active Nevada Medical License, 13448
Active California Medical License, G 54318;
Inactive Ohio, Massachusetts, Maryland and
D.C. Medical license

Academic Appointments:

1984-1991	Assistant Professor of Pathology, UCLA School of Medicine
1991-1995	Associate Professor of Pathology with Tenure, UCLA School of Medicine
1995-2004	Professor of Pathology with Tenure, UCLA School of Medicine
2000-2004	Holder of the George N. Papanicolaou Endowment, UCLA
2004-2009	The Donald A. Senhauser Endowed Professor and Chair of Pathology; Chief of Pathology Services, College of Medicine, The Ohio State University
2009-2015	Vice President of Academic Liaisons, Professor and Chair of Pathology, Nevada Cancer Institute (NVCI) and University of Nevada
2015-2017	Cancer Center Director and Chair of Pathology to NVCI's Successor (Roseman University)
2018-2019	Visiting Professor in Pathology, California University of Science and Medicine
2019-	Executive Director of the Cancer Center and Institute for Personalized Medicine; Professor of Pathology California University of Science and Medicine
2020-	The Dr. Carolyn S. Glaubensklee Endowed Cancer Center Executive Director of the Cancer Center and Institute for Personalized Medicine; Professor of Pathology California University of Science and Medicine

Hospital and Other Appointments:

1984-2004 Attending Pathologist, UCLA Center for Health Sciences
1989-Present Deputy Coroner, City of Los Angeles, Los Angeles, CA
2004-2009 Chief of Pathology Services, OSU Health System
2004-2009 Section Chief, Arthur G. James Cancer Hospital and Comprehensive Cancer Center
2009-2013 Scientific Leadership Council, Nevada Cancer Institute
2009-2013 Clinical Leadership Council, Nevada Cancer Institute
2012-2015 Founding Director of Nevada's Newborn Screening Program
2021- CLIA Laboratory Director, CUSM's Clinical Laboratory

Editorial and Reviewer Positions:

American Journal of Pathology	Journal of Investigative Dermatology
Cancer	Journal of Biological Chemistry
Cancer Research	Journal of Cellular Biochemistry
Clinical Cancer Research	Human Pathology
Oncogene	Journal of Clinical Investigation
Cancer Letters	Journal of Experimental Medicine
Proc Natl Acad Sci USA	Journal of Pathology
Laboratory Investigation	Science
J National Cancer Institute	Analytical Biochemistry
British Journal of Cancer	European J Cancer
Breast Cancer Research Treatment	American J Surgical Pathology
International Journal of Cancer	New England Journal of Medicine
The Breast Journal	Lancet

Honors and Other Special Scientific and Teaching Recognition:

Fellow, American Association for the Advancement of Science for "distinguished contributions to the field of tumor biology and metastasis, particularly for discoveries underlying the mechanisms of metastatic progression of human breast cancer", 2007

Keynote Speaker, First International Symposium on Inflammatory Breast Cancer, MD Anderson Cancer Center, 2008

Invited speaker, New Concepts Session of AACR: Inflammatory Breast Cancer: A Global Perspective of Translation from the Laboratory to the Clinic, "Expression of a stem cell phenotype and stem cell signaling in inflammatory breast cancer", April 21, 2009.

Keynote speaker, "Pseudomyxoma Peritonei and the Repayment of the Debt", 27th Annual George G. Bierkamper Student Research Convocation University of Nevada, January 19, 2010.

Professor and Salvadorini Endowed Chair of Pathology and Laboratory Medicine (designate), University of Nevada Medicine, 2009 - Present

Senhauser Endowed Chair of Pathology, The Ohio State College of Medicine, The Ohio State University, 2005-2009

Fellow of the George N. Papanicolaou Endowment, 2000-2004

The 2010 Stowell-Orbison Award of the United States and Canadian Academy of Pathology, Trainee: CE Graham-Lamberts, University of Nevada School of Medicine

CE Graham-Lamberts, AL Llewellyn, Y Ye, K Yearsley, **SH Barsky**, Lymphovascular tumor emboli recapitulate an in vitro mammosphere stem cell phenotype. *Modern Pathology*, 2010

The 2010 Stowell-Orbison Award of the United States and Canadian Academy of Pathology, Trainee: RW Lamberts, University of Nevada School of Medicine

RW Lamberts, RS Ritzlin, K Yearsley, **SH Barsky**, Multiple skin cancers arising in bone marrow transplant recipients can exhibit a donor origin. *Modern Pathology*, 2010

The 1998 Stowell-Orbison Award of the United States and Canadian Academy of Pathology, Trainee: Jerry OConnell, UCLA School of Medicine

O'Connell JT, Heras M, Palmarini M, Sharp J, **Barsky SH**. JSRV-related sequence and capsid protein in human lung BAC/PAC suggests a retroviral connection. *Lab Invest*, 1998.

The 1992 Stowell-Orbison Award of the United States and Canadian Academy of Pathology, Trainee: Helen Remotti, UCLA School of Medicine

Remotti H, Watson L, **Barsky SH**. Mammary Paget's disease: Evidence for a multicentric polyclonal epithelial "field" neoplasm lacking true epithelial invasion. *Lab Invest*, 1992.

"Citation Classic" designation by the Institute for Scientific Information (ISI), 2003 for 2 papers:

Liotta LA, Rao CN, and **Barsky SH**. Tumor invasion and the extracellular matrix. *Lab. Invest.* 49: 636-649, 1983.

Total Citations: 837

Barsky SH, Siegal GP, Jannotta F, and Liotta LA. Loss of basement membrane components by invasive tumors but not by their benign counterparts. *Lab. Invest.* 49: 140-148, 1983.

Total Citations: 444

Most Cited 2010 Article in Clinical Cancer Research:

Charafe-Jauffret E, Ginestier C, Iovino F, Diebel M, Esterni B, Houvenaeghel G, Extra JM, Bertucci F, Jacquemier J, Xerri L, Dontu G, Stassi G, Xiao Y, **Barsky SH**, Birnbaum D, Viens P, Wicha MS. Aldehyde dehydrogenase I-positive cancer stem cells mediate metastasis and poor clinical outcome in inflammatory breast cancer. *Clin Cancer Res* 16: 45-55, 2010.

The 50 Most-Frequently Read Articles of all time in the *American J Pathology*, 2008:

Yi Xiao, Ye Y, Yearsley K, Jones S and **Barsky SH**. The lymphovascular embolus of inflammatory breast cancer expresses a stem cell-like phenotype. *Am J Path* 173: 561-574, 2008.

The 2003 Benjamin Castleman Award – Most Outstanding Paper in Human Pathology:

O'Connell JT, Tomlinson JS, Roberts AA, McGonigle KF and **Barsky SH**. Pseudomyxoma peritonei is a disease of MUC2-expressing goblet cells. *Am J Path* 161: 551- 564, 2002.

Cornelius L. Hopper Scientific Achievement Award, First Prize, Research of the Highest Impact on Breast Cancer, California Breast Cancer Research Program, 2002

Cornelius L. Hopper Scientific Achievement Award, Honorable Mention, Most Innovative Research, California Breast Cancer Research Program, 2002

Cornelius L. Hopper Scientific Achievement Award, Honorable Mention, Most Generally Applicable Research, California Breast Cancer Research Program, 2002

Cornelius L. Hopper Scientific Achievement Award, Honorable Mention, Most Innovative Research and Most Generally Applicable Research, California Breast Cancer Research Program, 1999.

Recipient, Research Career Award, NCI, NIH, 1991-1996

Nominator (by invitation): Nobel Prize for Physiology or Medicine

Extramural Consultant to NCI/NIH Intramural Program of Tumor Cell Biology, 1995-1998

UCLA School of Medicine Nomination for Excellence in Education, 1992

Journal Front Cover Recognition:

J Biomolec Screen 15: 20-829, 2010.

“Imaging and analysis of cancer stem cells within 3 dimensional tumor spheroids”

Cytometry A 71:273-285, 2007.

“Semi-automated imaging system to quantitate Her-2/neu membrane receptor immunoreactivity in human breast cancer”

Cancer Research 62: 3826-3833, 2002.

“SPARKY: A feline bronchioloalveolar lung carcinoma model”

Laboratory Investigation 74: 781-796, 1996.

“Proteinase inhibitor controls myoepithelial tumors”

In Vitro Cell Develop Biol 32: 550-563, 1996.

“Self-spheroids forming at superconfluent densities”

Editorial Recognition of Published Work:

Stem Cell Origins of Solid Cancers: Evidence from Studying a Transplant Registry, *The Economist*, 2008

“Does marijuana or crack cocaine cause cancer?” *J Natl Cancer Inst* 90: 1182-1185, 1998.

“Looking inside the breast duct”, *Lancet* 348: 997-999, 1996.

“The clonality of Paget’s disease” *J Invest Derm* 1992

“Cancer hypothesis validated”, *J Invest Derm* 88:245, 1987

Benjamin Castleman Award Nomination, NIH

Medical Alumni Scholar Award, University of Pittsburgh, to most outstanding medical student, 1980

Mead Johnson Excellence of Student Research Award

Paul McClain Award to most outstanding student in pharmacology

Alpha Omega Alpha

Phi Beta Kappa

Summa Cum Laude Graduate, University of Pittsburgh

Most Outstanding Basic Cadet, Air Force ROTC, University of Pittsburgh

Valedictorian, Sto-Rox High School, McKees Rocks, PA.

Membership in Professional Societies:

Member, Association of Pathology Chairs (APC)

Pathologist Representative, Southwest Oncology Group (SWOG)

Member, United States and Canadian Academy of Pathology

Member, American Society of Investigative Pathology, American Association for Cancer Research and American Society of Cell Biology

Industry (Company) Entrepreneurial Managerial Experiences:

Scientific Director, Scientific Advisory Board, Pro-Duct Health, Inc. (Start-Up Company), 1998-2002; acquired by Cytac, Inc., 2002

Principal Investigator, Pro-Duct Health, Inc.- NIH STTR and SBIR Programs, 1998-2002

Medical Director, Imaging Insight, Inc. (Start-Up Company), 1999-2003; acquired by BioImagene, 2003

Chief Medical Officer, BioImagene, 2003 – 2010, acquired by Ventana, 2011

Principal Investigator, BioImagene – UCDiscovery and NIH STTR and SBIR Programs, 2003 - 2005

Chief Medical Officer, TMAker, 2014

Administrative and Managerial Experiences (recent):

CLIA Laboratory Director, CUSM's Clinical Laboratory- 2021-

Founding CLIA Laboratory Director, Nevada's Newborn Screening Program and the Anatomical and Clinical Pathology Laboratory of Medical Associates – North, University of Nevada School of Medicine, 2019-2015

Director, of Cancer Biology, Whittemore Peterson Institute, University of Nevada, Reno, 2009 - 2015

Vice President – Academic Liaisons, Nevada Cancer Institute, 2009-2013

Chief of Pathology and Laboratory Services, Nevada Cancer Institute, 2009 - 2013

Professor and Vasco A. Salvadorini Endowed Chair of Pathology and Lab Medicine, University of Nevada School of Medicine, 2009 - 2014

Administrative and Managerial Experiences (past):

Chairman of the Department of Pathology and Chief of Pathology Services, The Ohio State College of Medicine, The Ohio State University, 2004 - 2009

Section Chief, The James Cancer Hospital, 2004 - 2009

Senior Leader, Experimental Therapeutics Branch, James Comprehensive Cancer Center, 2004 – 2009

Member, The James Comprehensive Cancer Center, 2004 - 2009

Chief, Laboratory of Tumor Invasion and Metastasis, Jonsson Comprehensive Cancer Center, UCLA, 1988-2004

Member, OSU Search Committee, Chair of Bioengineering Department, 2005-2006

Member, OSU Search Committee, Chair of Orthopedics, 2006-2007

Member, OSU Tissue Informed Consent Task Force, 2007-2008

Faculty Advisor, Women's Health Initiative, Rhonda Mann Center, UCLA

Faculty Advisor, Iris Cantor Diagnostic Breast Imaging Center, UCLA
Faculty Advisor, University of California Visiting Scientist Program
Member, Search Committee(s): Director, UCLA/Revlon Breast Center;
Chairman, Div. of Human Genetics; Faculty, Dept. of Pathology
Director, Department of Pathology, Grand Rounds, 1997-2001
Member, UCLA/Revlon Breast Center Steering Committee, 1995 - 2004
Departmental Representative, Academic Senate, 1997 - 2004
Full Member, Jonsson Comprehensive Cancer Center, 1985 - 2004
Pathologist Representative, UCLA Lung Cancer Task Force, 1992 - 2004
Pathologist Representative, Prostate Cancer Task Force, 1992 - 2004

Extramural Scientific Study Sections and Advisory Boards:

NCI, NIH Study Section on Meritorious Cancer Proposals to Reduce
Student Loan Debt, August 2015

Member, NIH Consortium of Rare and Orphan Diseases, March, 2014.

Member, NIH ZRG1 HOP-Y Rare Diseases Clinical Research Consortium,
1st meeting, February 19, 2009 – February 20, 2009.

Member, Pathogenesis Study Section, California Breast Cancer Research
Program, 2007

Member, External Advisory Board, MD Anderson Hospital, Inflammatory
Breast Cancer Task Force, 2007

Member, External Advisory Committee, Northwestern University SPORE
in Breast Cancer, 2005

Member, Program Project (P01) Lung Cancer Study Section, NCI, 2004

Member, NCI Breast Cancer SPORE grants Study Section, 2000-Present

Member, NCI Lung Cancer SPORE grants Study Section, 2000-Present

Leader, NCI SBIR Study Section on Developmental Therapeutics, 2000

Member, Special NCI, NIH Study Section on Metastasis, 1993-1999

Member, DOD Breast Cancer Study Sections, 1997-1999

Member, National Cancer Institute of Canada Study Section, 1997-1999

Grant Reviewer, Terry Fox Foundation, 1997 – 1999

Member, National Cancer Institute, NIH Site Visit Study Section for P01's on Prostate Cancer, 1996-1997.

Veterans Administration, Merit Review Panel 1995-1999

Member, Special NCI, NIH Study Section on Prostate Cancer, 1992-1996

Member, Pathology B Study Section, NCI, NIH, 1988-1990

Extramural Reviewer, Wright Foundation, USC, 1993

Additional Private Sector Experience:

Consultant, Specialized Genetic Laboratories, Santa Monica, CA

Consultant, Aeron Biotechnology, San Leandro, CA

Consultant, ImPath Diagnostic Laboratories, Los Angeles, CA

Consultant, Strategic Biosolutions

Clinical Programs:

Director of Breast Pathology, The Ohio State University

Director of Pathology, UCLA/Revlon Breast Center

Teaching Programs:

Lecturer, Course in Cancer Biology (#702.04), Integrated Biomedical Sciences Graduate Program (IBGP), Ohio State, 2005-Present

Lecturer, Course in Fundamentals of Oncology: Pathology-Veterinary Biosciences (#640), Ohio State, 2005-Present

Faculty Sponsor, Student Research Program (SRP) for UCLA Undergraduates, 1986-2004

Director of Medical School Teaching, Cancer Pathology Section, UCLA and UCLA-Harbor-Riverside Program, 1996-1998

Director, Graduate Course: Major Concepts in Oncology, 1986-2004

Training Grants:

Faculty member, Integrated Biomedical Sciences Graduate Program (IBGP), The Ohio State University, P.I.: Allan Yates, 2005

Faculty member, MD-PHD program, The Ohio State University, 2005-Present, P.I.: Allan Yates, 2007

Faculty member, NCI T32 training grant Postdoc training in cancer, 2008

Major Research Interests:

Tumor stem cells and tumor latency

Basic Molecular Mechanisms of Tumor Invasion and Metastasis

Molecular Mechanisms of Lymphovascular Invasion of Inflammatory Breast Cancer

Myoepithelial/Myofibroblast Paracrine Suppression of Epithelial (DCIS) Cancer Progression

Breast Ductoscopy, Lavage and Intraductal Gene Therapy

Bronchioloalveolar Lung Carcinoma, Comparative Oncological Studies and Molecular Mechanisms

Automation of Tissue Microarray Analysis and Routine Histopathological Diagnosis through Digital Image Algorithms

Faculty Mentorship of Research Awards:

Nick Tschernia, Lymphovascular breast carcinoma tumoral emboli beget emboli through stem-cell initiated self-budding histogenesis, 28th Annual George G. Bierkamper Student Research Convocation University of Nevada, January 15, 2011

CE Graham-Lamberts, The 2010 Stowell-Orbison Award of the United

States and Canadian Academy of Pathology

RW Lamberts, The 2010 Stowell-Orbison Award of the United States and Canadian Academy of Pathology

Yin Ye, Ph.D., OSU Post-doctoral fellow: AACR-AstraZeneca Scholar-in-Training Award, AACR Annual Meeting, 2008

Elizabeth Mitchell, OSU Medical student, Roessler Grant Award Recipient, 2008

Sepi Mahooti, M.D., OSU Resident, Finalist, Ohio Society of Pathologists Residents Competition, 2008

Jerome T. O'Connell, M.D.: 2003 Benjamin Castleman Award to Most Outstanding Paper in Human Pathology; First prize in the 1997 Los Angeles Pathology Residents Competition; Second Prize in the 1998 Los Angeles Pathology Residents Competition; The 1998 Stowell-Orbison Award of the United States and Canadian Academy of Pathology; the Binford-Dammin Society First Place Poster Prize, the Binford-Dammin Society of Infectious Disease Pathologists, 1998; the Directors of Anatomical Pathology Autopsy Award, 1998.

Alice A. Roberts, M.D., First prize in the 2002 Los Angeles Pathology Residents Competition

James S. Tomlinson, M.D., First Place Award, Abstract/Poster Presentation, 5th Annual Multidisciplinary Symposium on Breast Disease, Rome, Italy, 2000; First prize in the 2000 Los Angeles Pathology Residents Competition; Second prize, 6th Annual Multidisciplinary Symposium on Breast Disease, Amelia Island, Florida, 2001

Z-M Shao, M.D.: 1998 Chancellor's Award for Most Outstanding Postdoctoral Research at UCLA; First Place Awards (two), Abstract/Poster Presentation, 3rd and 4th Annual Multidisciplinary Symposiums on Breast Disease, Amelia Island, Florida, 1998, 1999.

Paul Kedeshian, M.D.: Basic Science Award, Southern California Resident Research Symposium, 1997; First Prize in Basic Research, Paul H. Ward, M.D. Society Annual Symposium, 1997; Vice President's Award for Basic Research, Triologic Society, 1998.

Mark Sternlicht, Ph.D.: Outstanding graduate student award, 1994; First prize in the 1996 Los Angeles Pathology Residents Competition

Judy Ko, M.D.: Second prize in the 1995 Los Angeles Pathology

Residents Competition

Susan Doberneck, M.D.: First prize in the 1994 Los Angeles Pathology Residents Competition

Lester Thompson, M.D.: First prize in the 1993 Los Angeles Pathology Residents Competition; 2nd Prize College of American Pathologists Award, 1993

Helen Remotti, M.D.: The 1992 Stowell-Orbison Award of the United States and Canadian Academy of Pathology

Doug Ross, M.D.: 2nd Best Resident Paper, American Society for Head and Neck Surgery, 1991

Lee Nelson, M.D.: First Prize Medical Scientist Minority Student Training Program, National Medical Fellowship Program, 1987

Shirley Huang, M.D.: First prize in the 1986 Los Angeles Pathology Residents Competition

Faculty Supervision of Graduate and Postdoctoral Research

Trainees:

Past Trainees with subsequent independent funding

Rayudu Gopalakrishna, Ph.D. Post-doc 1986-1989

Present Position: Department of Pharmacology, USC,
Los Angeles, CA. (Associate Professor)

Doug Ross, M.D. Post-doc 1991-1993

Present Position: Department of Head and Neck Surgery, Yale, CT.
(Assistant Professor)

Mark Sternlicht, Ph.D. Pre-doc 1991-1996

Present Position: Department of Anatomy, UCSF, San Francisco,
CA. (Assistant Professor)

Suzi Safarians, Ph.D. Pre-doc 1992-1996

Present Position: Baxter Laboratories, Glendale, CA.
(Independent scientist)

Doug Yamanishi, Ph.D. Post-doc 1996-1998

Present Position: Department of Molecular Biology, Boehringer-
Mannheim, Palo Alto, CA.
(Independent scientist)

Paul Kedeshian, M.D. Resident 1996-1997
Present Position: Department of Head and Neck Surgery, UCLA
School of Medicine, Los Angeles, CA (Assistant Professor)

Mary Alpaugh, Ph.D. Post-doc 1997-2004
Present Position: Department of Biology, City College of New York,
NY (Assistant Professor)

Zhi-Ming Shao, M.D. Post-doc 1997-2002
Present Position: Department of Breast Surgery, Shanghai Medical
Center, China (Professor)

James S. Tomlinson, M.D., Ph.D. Ph.D. candidate 1998-2004
Present Position: Department of Surgery, UCLA School of Medicine,
Los Angeles, CA (Assistant Professor)

Other Past Academic Faculty Trainees

Jerome T. O'Connell, M.D. Resident 1995-1998
Present Position: Private Group Practice, Pathology,
Washington D.C.

Martin Hur, Ph.D. Post-doc 1989-1991
Present Position: Department of Biology, University of Manila,
Phillipines (Assistant Professor)

Lester Thompson, M.D. Resident 1990 – 1994
Present Position: Chief, Head & Neck Pathology,
AFIP, Washington, DC 2000 -2004

Lie Min Hu, Ph.D. Post-doc 1991-1994
Present Position: Department of Pediatrics, University of Arkansas

Kassim Khalil, M.D. Post-doc 1991-1993
Present Position: Department of Obstetrics/Gynecology, University
of Jerusalem, Israel (Assistant Professor)

Carol Mirell, Ph.D. Post-doc 1992-1994
Present Position: Department of Medicine, Wadsworth VA Medical
Center, UCLA, CA. (Staff Research Associate)

Juan Abraham, M.D. Post-doc 1992-1997
Present Position: Department of Pathology, University of Peru,
Argentina (Assistant Professor)

G.K. Shanmugasundaram, Ph.D.	Post-doc	2000-2004
Gang Wang, Ph.D.	Post-doc	2000-2004
Zhiqiang Liu, Ph.D.	Post-doc	2000-2003
Barden Chan, Ph.D.	Post-doc	1999-2001
Weiye Wang, M.D., Ph.D	Post-doc	1999-2001
Maggie C. Lee, M.D.	Resident	1996-2001
Maria Deato	Undergraduate	1998-2001
Lena B. Dishakjian	Undergraduate	1998-2001
Sina Kasraeian	Premed	1999-2001

Faculty Mentorship of Junior Faculty:

Mai Nguyen, M.D.	Assistant Professor of Surgery NIH Clinical Investigator Award	1996-2000
Shikha Bose, M.D.	Assistant Professor of Pathology Jonsson Comprehensive Cancer Center California Breast Cancer Program, First Award	1998-2000

Faculty Participation on Ph.D. Candidates Thesis Committees:

Role	Candidate	Time Period
Chair	James S. Tomlinson	1998-2002
Chair	Mark Sternlicht	1994-1996
Chair	Suzi Safarians	1994-1996
Member	Melina Pervin	2000-2003
Member	Mai Tan	1992-1994
Member	Joyce Brunell	1990-1992
Member	Helene Dill	1987-1989

Member	Chen Park	1986-1988
Member	Marilyn Lampe	1985-1987
Member	Wei Gong	1984-1986

Present Trainees

Joseph D. Tellez, Ph.D.	Post-doc	2009-Present
Nick Tschernia	MD, PhD student	2010-Present
Meagan Belcher	Undergraduate	2009-Present
Shainy Hegde, M.D.	Resident	2010-Present
Yin Ye, Ph.D.	Research Scientist	2005-Present
Yi Xiao, Ph.D.	Post-doc	2005 – 2009
Kurtis Yearsley, Ph.D.	Post-doc	2006 – 2009
Gary Tozbikian	Post-sophomore fellow	2006 – 2008
Girish Sharangpani, DCA	Post-doc	2006 – 2008
Amitabha S. Basu, MSc	Post-doc	2006 – 2008
Elizabeth Mitchell	Med student (Roessler)	2008 - 2009
Brandon Shetuni	Med student (Roessler)	2008 - 2009
Joe Ostler	MD, PhD student	2008 - 2009
Camille Boussand	MEng	2008 - 2009
April Sandy	Doctoral student (rotating)	2007
Sean Little	Doctoral student (rotating)	2008
Robert Shott, M.D.	Pathology resident	2008
Sepi Mahooti, M.D.	Pathology resident	2008

Sponsored Research Programs:**Recent and Pending Support****Principal Investigator / Co-Principal Investigator**

Grant No.	Agency	Title	Direct Costs/Year	Period
PI: Sanford H. Barsky, M.D.			\$250,000	09/01/22 - 08/30/25
		California Institute of Regenerative Medicine		
		"Use of constitutive and inducible oncogene-containing iPSCs as surrogates for transgenic mice to study breast oncogenesis"		
		Review Pending		
PI: Sanford H. Barsky, M.D.				
B27IB3912		California Breast Cancer Research Program (CBCRP)		
		"Regulation of Breast Cancer Oncogenesis by the Cell of Origin's State of Differentiation"		
		Direct, \$150,000 Indirect, \$15,000 Total \$165,000		
		Period: 07/01/20 - 06/30/23		
PI: Sanford H. Barsky, M.D.				
W81XWH-10-1-0046		Department of Defense		
		"Treatment of Combined Injury Using Induced Pluripotent Stem (iPS) Cell-Based Therapy".		
		\$350,000 Direct, \$152,250 Indirect, \$502,250		
		7/01/12 – 06/30/22		
PI (local): Sanford H. Barsky, M.D.				
KG08128702		Susan Komen Promise Grant / MD Anderson Consortium (29748/98388845); Fredika Robertson, PI		
		"A Study of the Molecular Biology of Inflammatory Breast Cancer: Novel Targets and Therapeutics for Inflammatory Breast Cancer"		
		\$118,000/year 09/01/10 – 06/30/15		
PI: Sanford H. Barsky, M.D.				
Strategic Integrative Medicine-Engineering Research Partnership, University of Nevada				
		"High Throughput Tissue Microarray (TMA) Construction and Interpretation to Facilitate Biomarker Discovery"		
		\$50,000/year 07/01/13 – 06/30/16		
PI: Sanford H. Barsky, M.D.				
Sponsor: CTR-IN NIH				
		"Nevadan Newborn Blood Spots to Detect Toxic Genomic Imprints in the Germ Line"		
		\$ 75,000/year 07/01/14 – 06/30/16		

PI: Sanford H. Barsky, M.D.

Sponsor: CTR-IN NIH

“Blocking Strategies of Self-Budding Embolic Propagation That May Promote or Inhibit Skin Recurrences in Inflammatory Breast Cancer”

\$75,000/year 07/01/14 -06/30/16

PI: Sanford H. Barsky, MD

Sponsor: ACS

129818

“American Cancer Society- Institutional Research Grant”

Good score, not funded, revision pending (critique enclosed)

2016-2019

PI: Sanford H. Barsky, MD

Sponsor: DOD

BC085018

“Altered redistribution /accumulation of E-cadherin as a dominant oncogene in IBC”

Excellent score, not funded, revision pending (critique enclosed)

2018- 2021

PI: Sanford H. Barsky, MD

Sponsor: NSF

1455697

“High throughput tissue microarray (TMA) construction and interpretation to facilitate biomarker discovery”

Meritorious score, not funded, revision pending (critique enclosed)

2016-2019

PAST GRANT SUPPORT:

Principal Investigator

<u>Grant No.</u>	<u>Agency</u>	<u>Title</u>	<u>Direct Costs/Year</u>	<u>Period</u>
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R01 NIH, CA 71195 \$180,000 2004-2009

Use of a novel myoepithelial matrix and cell line to support the growth of primary breast and prostate cancer

Strategic Initiative Grant, OSU

Clues to the stem cell origin of human cancers by studying a transplant registry who later developed solid cancers.

Amount: \$80,000

R03, NIH, CA 690046 \$ 30,000 1997-2003
 "A myoepithelial-based immunocytochemical strategy of increasing the accuracy of breast FNA in older women"

Pro-Duct Health / Cytac Grant \$300,000 2001-2003
 "Monoclonal antibodies to DCIS and other precancerous surface determinants"

Pro-Duct Health, Inc. Grant \$100,000 1998-2003
 "DCIS-myoepithelial cell interactions in ducts and secretions"

Margaret E. Early Trust \$75,000 1998-2003
 "A study of the retroviral link of human bronchioloalveolar lung carcinoma with its sheep counterpart (jaagsiekte)"

The Nichols Foundation \$ 75,000 1998-2003
 "JSRV-related sequence and capsid protein in lung BAC/PAC"

UC Tobacco-Related Disease Research Program \$75,000 1999-2003
 "The retroviral link of human PAC/BAC with sheep jaagsiekte"

The Jenny Jones Foundation \$ 30,000 1997-2003
 "Monoclonal antibodies to breast myoepithelial cells"

California Breast Cancer Research Program \$100,000 1999-2003
 Grant CA BCRP 5JB-0104
 "A novel model of inflammatory breast cancer"

California Breast Cancer Research Program \$75,000 2000-2003
 Grant CA BCRP 6JB-0044
 "A study of the molecular heterogeneity of LCIS"

Jonsson Comprehensive Cancer Center \$32,000 2000-2002
 Sponsor: Post-doctoral award to Zhi-Ming Shao, M.D.
 "Novel transforming genes in inflammatory breast cancer"

California Breast Cancer Research Program \$40,000 2000-2002
 Sponsor: Post-doctoral award to Mary L. Alpaugh, Ph.D.
 "Anti-E-cadherin apoptosis of inflammatory breast carcinoma"

R01 CA 40225 NCI, NIH Tumor desmoplasia \$100,000 1986-1996

K04 CA 01351 NCI, NIH Tumor cell-desmoplasia \$60,000 1991-1997
 (Research Career Award) interactions which
 influence metastasis

CICR/JCCC Basic Grant Transfer of the metastatic \$30,000 1995-1997 phenotype through gene transfer

CRCC Basic Seed Grant Transfer of the metastatic \$30,000 1995-1997 phenotype through somatic cell hybridization

CA-09056 NCI, NIH Establishment of a human \$15,000 1993-1995 matrix-secreting cell line & xenograft as a source of basement membranes

4IT-0328

Tobacco-Related Disease Research Program A new approach for studying \$75,000 1993-1995 the mechanism of squamous metaplasia: "IDEA" Grant

Carolan Foundation Prostate Cancer Grant Use of a novel myoepithelial \$15,000 1995-1997 matrix to support prostate cancer

CRCC Small Grant A novel strategy for the \$25,000 1991-1992 determination of clonality in tumoral disease states

CICR Small Seed Grant Clonality determination in \$30,000 1991-1992 experimental models of tumor progression

AIDS Basic Research A study of the clonality \$20,000 1993-1994 Kaposi's sarcoma

R03 DE07288 NIDR, NIH Establishment of human \$30,000 1986-1988 basement membrane secreting xenografts

CRCC Small Grant A study of tumor \$25,000 1986-1988 desmoplasia

CICR Small Grant A study of tumor \$30,000 1991-1992 desmoplasia

UCLA Academic Senate Grant Tumor desmoplasia \$10,000 1986-1988

NIH, NCI Shared Instrument Tumor desmoplasia \$15,000 1986-1988

PAST GRANT SUPPORT:**Co-Principal Investigator**

Grant No.	Agency	Title	Direct Costs/Year	Period
Co-PI: Sanford H. Barsky, M.D.				
PI: Jeff Parvin, PhD				
1R01CA141090-01 NIH, PHS				
		“Informatics Methods for Identifying Breast Cancer Control Genes and Proteins”		
			\$93,000/year	06/01/09 – 05/30/14
R01 DA 03018		Pulmonary effects of habitual use of marijuana	\$50,000	1993-1997
(Donald Tashkin, P.I.)				
R01 DA 03897		Effects of cocaine smoking on lung physiology and host defense	\$10,000	1993-1997
(Donald Tashkin, P.I.)				
DAMD 17-94-J-4281	DOD		\$75,000	1997-2002
(S. Love, P.I.)		“Nipple cannulation as access to the breast ductal system”		
NCI, NIH USPHS 1 R21 CA83111			\$100,000	1999-2004
(M. Nguyen, P.I.)		“A study of an angiogenesis-independent phenotype”		
NCI, NIH USPHS 1 R21 CA091988-01			\$100,000	2001-2004
(M. Nguyen, P.I.)		“Breast cancer diagnosis with bFGF”		
NIH/NCI P01 CA5926			\$60,000	1999-2002
(J. Economou, P.I.)				
Individual project PI: “Use of rAdenovirus (rAd) and rAdeno-associated virus (rAAV) to selectively target breast epithelium and myoepithelium”				
Jonsson Comprehensive Cancer Center			\$30,000	2000-2003
(S. Bose, P.I.)		“A study of LCIS by laser capture microdissection”		
International Union Against Cancer			\$34,600	2000-2003
(Z-M Shao, P.I.)		“A study of the suppressive actions of genistein”		

Intramural Participation in Intramural Research Symposia and Retreats

University of Nevada – Research Day

Keynote speaker, "Pseudomyxoma Peritonei and the Repayment of the Debt", 27th Annual George G. Bierkamper Student Research Convocation University of Nevada, January 19, 2010.

OSU-Industry Day

Invited speaker, "High throughput tissue approaches accelerating drug discovery and personalized medicine", December, 2006

Solid Tumor Symposium

Invited speaker, "Facilitating solid tumor biomarker and drug discovery through high throughput tissue approaches", June, 2007

Breast Cancer Symposium

Invited speaker, "Inflammatory breast cancer as a model of breast cancer metastasis", April, 2007

Lung Cancer Symposium

Invited speaker, "New insights into bronchioloalveolar lung cancer", March, 2007

OSU School of Veterinary Medicine

Invited speaker, "Stem Cells, Metastasis and High Throughput Tissue Profiling", June, 2007

Cancer Center Annual Research Day – 2007

Gentchev L, Jimenez RE, Mahooti S, Ye Y, **Barsky SH**. Breast carcinomas exhibit epithelial-mesenchymal transition with expression neutralizing effects on Her-2/neu gene amplification.

Ye Y, **Barsky SH**. Regulation of snai2 by estrogen receptor-alpha and glycogen synthase kinase-3 beta in human breast cancer.

Mahooti S, Ye Y, Jones S, **Barsky SH**. Breast duct carcinoma in situ (DCIS) can progress directly to lymphovascular invasion by myoepithelial-endothelial metaplasia.

Yi Xiao, Yin Ye, **Barsky SH**. Targeting up-regulated notch signaling in the CD133⁺ stem cells within the protected niche of the lymphovascular embolus of inflammatory breast cancer.

Tozbikian G, Yearsley K, Ye Y, **Barsky SH**. Clues to the stem cell origin of human cancers by studying a registry of organ transplant recipients who later developed secondary solid cancers.

Cancer Center Annual Research Day – 2008

Ostler J, Gentchev L, Jimenez RE, **Barsky SH** Human breast carcinomas exhibit a biphasic Her-2/neu expression pattern due to alterations in receptor heterodimerization and downstream signaling.

Shott R, Mahooti S, Jones S, Ostler J, Ye Y, **Barsky SH**. The metastatic dichotomy between sarcomas and carcinomas is partially explained by their relative levels of vasculogenesis and lymphangiogenesis but not by their VEGF expression profile.

Little S, Sandy A, Ye Y, Xiao Y, **Barsky SH**. Identification of human tumor stem cells by a novel detection strategy based on comparative genomic FISH.

Mahooti S, Shott R, Jones S, **Barsky SH**. In situ carcinomas can exhibit vasculogenic mimicry.

Student Research Day – 2007

Gentchev L, Jimenez RE, Mahooti S, Ye Y, **Barsky SH**. Breast carcinomas exhibit epithelial-mesenchymal transition with expression neutralizing effects on Her-2/neu gene amplification.

Ye Y, **Barsky SH**. Regulation of snai2 by estrogen receptor-alpha and glycogen synthase kinase-3 beta in human breast cancer.

Mahooti S, Ye Y, Jones S, **Barsky SH**. Breast duct carcinoma in situ (DCIS) can progress directly to lymphovascular invasion by myoepithelial-endothelial metaplasia.

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Tozbikian G, Yearsley K, Ye Y, **Barsky SH**. Clues to the stem cell origin of human cancers by studying a registry of organ transplant recipients who later developed secondary solid cancers.

Student Research Day – 2008

Ostler J, Gentchev L, Jimenez RE, **Barsky SH**. Human breast carcinomas exhibit a biphasic Her-2/neu expression pattern due to alterations in receptor heterodimerization and downstream signaling.

Shott R, Mahooti S, Jones S, Ostler J, Ye Y, **Barsky SH**. The metastatic dichotomy between sarcomas and carcinomas is

partially explained by their relative levels of vasculogenesis and lymphangiogenesis but not by their VEGF expression profile.

Little S, Sandy A, Ye Y, Xiao Y, **Barsky SH**. Identification of human tumor stem cells by a novel detection strategy based on comparative genomic FISH.

Mahooti S, Shott R, Jones S, **Barsky SH**. In situ carcinomas can exhibit vasculogenic mimicry.

Denman Undergraduate Research Forum – 2007

Triolo M, Yi Xiao, Yin Ye, **Barsky SH**. Targeting up-regulated notch signaling in the CD133⁺ stem cells within the protected niche of the lymphovascular embolus of inflammatory breast cancer.

Denman Undergraduate Research Forum – 2008

Solomon R, Little S, Sandy A, Ye Y, Xiao Y, **Barsky SH**. Identification of human tumor stem cells by a novel detection strategy based on comparative genomic FISH.

Pathology Grand Rounds

Virchow – Meet Hal: Virtual Pathology in the Digital Age, February, 2005

The Mitzvahs of the Myoepithelial Cell
October, 2005

Biomarkers, Personalized Medicine and High Throughput
October, 2006

The Tumor Embolus – Embryonal Blastocyst Connection
October, 2007

Participation in International and Global Health Initiatives

Invited Speaker, Second International Symposium on Inflammatory Breast Cancer, Marseille, France 2010

Speaker, International Symposium on Inflammatory Breast Cancer, Rabat, Morocco, 2007

Speaker, OSU's Initiatives on Global Health in India and Latin America, 2007

Invited Lectureships:

Invited speaker, Digital Pathology, United States Academy of Pathology, 2010

Invited speaker, Digital Pathology, College of American Pathologists, 2009

Invited speaker, California Society of Pathologists, 2009

Invited speaker, New Concepts Session of AACR: Inflammatory Breast Cancer: A Global Perspective of Translation from the Laboratory to the Clinic, “Expression of a stem cell phenotype and stem cell signaling in inflammatory breast cancer”, April 21, 2009.

Invited speaker, Pathology Grand Rounds, MD Anderson Cancer Center, The University of Texas, “Tumor cell-myoepithelial interactions which influence metastasis”, February 5, 6, 2009.

Invited speaker, Transplant Center, Ohio State University, “Insights into the stem cell origin of human cancers by studying a registry of bone marrow and other organ transplant recipients who later developed solid cancers”, February 18, 2009.

Invited speaker, Workshop on Salivary Gland Tumor Research: Current Status and Future Directions, National Institute of Dental Research, NIH, Bethesda, MD, Fall, 2008.

Invited speaker, Karmanos Cancer Center, Detroit, Michigan “The tumor embolus-blastocyst connection: Is it the rainbow connection?”, June, 2008

Invited speaker, Wayne State College of Medicine, Detroit, Michigan “Accelerating biomarker and drug discovery through high throughput tissue approaches”, June, 2008

Invited speaker, Genetech Imaging Symposium, “Automation of whole slide and TMA interpretation for drug discovery”, October, 2007.

Invited speaker, Drexel University Histopathology Image Analysis Workshop, “Automation of TMA construction and interpretation through a combination of epithelial and specific recognition algorithms”, August 14, 2007.

Invited speaker, Cytac, Inc., Boxboro, MA, “Targeting the ductal-myoepithelial unit of the breast through ductal lavage”, July, 2007

Host and Guest Speaker, Update Course in Surgical Pathology, Department of Pathology, The Ohio State University, August, 2006

Host and Guest Speaker, Update Course in Surgical Pathology, Department of Pathology, The Ohio State University, August, 2005

Guest Speaker, 4th Santa Barbara Breast Cancer Symposium, Santa Barbara, CA The bone marrow stem cell origin of mammary foam cells (macrophages), desmoplasia and angiogenesis, March 2005

Visiting Professor, Department of Pathology, Weill Medical College of Cornell University, March 15-17, 2004

Invited Speaker, 8th Annual Perspectives in Thoracic Cancer, "What is new in bronchiololalveolar carcinoma? New York, New York, October 17-18, 2003

Keynote Speaker, 30th Annual Medical Student Research Day, "A patient with pseudomyxoma peritonei and the repayment of the debt", University of South Alabama College of Medicine, August 8, 2003

Santa Barbara Breast Cancer Symposium, Santa Barbara, CA "Of mice, macrophages and mammary glands", March 2003

2002 The XXXth Meeting of the International Society for Oncodevelopmental Biology and Medicine, "Tumor vasculogenesis", September 8-12, 2002, Boston, MA

2002 Cytac Corporation Retreat, "The intraductal approach to the breast", July 28-30, 2002, Boxborough, MA

NIH Consensus Conference on inflammatory breast cancer, National Cancer Institute, National Institutes of Health, Bethesda, Maryland, 2001

Symposium on myoepithelial cells. Breast Cancer Task Force, University of California at San Francisco, 2001

Santa Barbara Breast Cancer Symposium, Santa Barbara, CA, "The myoepithelial defense", 2001

6th Annual Multidisciplinary Symposium on Breast Disease, "The natural biology of DCIS", Amelia Island, Florida, February, 2001.

5th Annual Perspectives in Thoracic Cancer, "Bronchioloalveolar lung

cancer - a different type of lung cancer", Charleston, SC, October 20-21, 2000.

Susan Komen Symposium on Breast Cancer, "Inflammatory breast cancer", September, 2000

International Congress for Cell and Tissue Culture, San Diego, CA, "In vitro models of cell-cell interaction to study cancer", June 10-15, 2000

8th International Conference on Gene Therapy of Cancer, San Diego, CA, "Targeting the myoepithelial-epithelial connection in human breast cancer", 1999

Dana Farber Cancer Center and Harvard Medical School, Boston, MA, "A metastasis caught in the act", 1999

NCI, NIH, Bethesda, MD, "The mechanism of lymphovascular invasion and the inflammatory breast carcinoma phenotype", 1999

California Breast Cancer Research Program, Los Angeles, CA, "The mechanism of inflammatory breast cancer", 1999

Tobacco Related Disease Research Program, San Francisco, CA, "A retroviral link to human tobacco-related lung cancer", 1999

The Lustgarten Foundation for Pancreatic Cancer Research, New York, New York, "Novel approaches to the therapy of pancreatic cancer", 1999

University of Iowa, "Targeting the myoepithelial-epithelial connection in breast and other cancers", 1999

University of Southern California, "The mechanism of inflammatory breast cancer and the intravasation step of metastasis", 1999

University of Florida, "The myoepithelial defense in human breast cancer", 1998

University of South Carolina, Charleston, SC, "A study of the retroviral link of human bronchiolalveolar lung carcinoma with its sheep counterpart (jaagsiekte)", 1998

Tulane University, "Evidence of a dominant transcriptional pathway which regulates an undifferentiated and complete metastatic phenotype", 1998

Albert Einstein College of Medicine, Bronx, New York, "Host bystander paracrine effects on human breast cancer progression", 1997

University of Texas at San Antonio, "The tumor suppressive properties of the human breast myoepithelial cell", 1997

Harvard University, "The human myoepithelial cell is a natural inhibitor of angiogenesis", 1997

Amgen Corporation, "High thru-put screen of myoepithelial cell secreted cDNAs holds promise of identifying novel proteinase and angiogenic inhibitors", 1997

Chemicon Corporation, "*Humatrix*, a novel myoepithelial matrical gel with unique biochemical and biological properties", 1997

Cedars-Sinai Hospital, Grand Rounds, "Epigenetic regulation of the metastatic process", 1997

Los Angeles Society of Pathologists, "Use of breast ductoscopy to study precancerous breast disease", 1997

Los Angeles Breast Cancer Inter-Institutional Task Force, "DCIS progression to invasive breast cancer is epigenetically regulated", 1997

UCLA Medical Grand Rounds, "Myoepithelial-derived maspin is an inhibitor of breast carcinoma invasion", 1996

UCLA Surgical Grand Rounds, "Myoepithelial cells constitutively secrete numerous angiogenic and proteinase inhibitors", 1996

UCLA Urology Grand Rounds, "Prostatic basal cells are the functional equivalent of breast myoepithelial cells", 1996

UCLA Pathology Grand Rounds, "Upregulation of CD44 and PAI2 in human myoepithelial cells is associated with augmentation of their defensive activity", 1996

SUNY, Brooklyn, "The human myoepithelial cell blocks proliferation and induces apoptosis of breast carcinoma cell lines", 1996

LSU at Shreveport, "Latest advances in tumor invasion and metastasis", 1996

USC Grand Rounds, "Evidence of a dominant transcriptional pathway

which regulates tumor progression and metastasis", 1995
City of Hope Grand Rounds, "Dominance of the spontaneously metastatic phenotype in somatic cell hybridization studies", 1995

University of California, Davis, "Multifocal bronchioloalveolar lung cancer represents a disease of multiclonal origin", 1994

University of California, Irvine, "Rising incidence of bronchioloalveolar lung cancer and its implications", 1994

Mayo Foundation and Clinic, "The importance of the desmoplastic response to tumor invasion", 1993

University of Pittsburgh, "The desmoplastic response to tumor invasion exerts both positive and negative growth and invasion effects on breast carcinoma", 1993

University of Alabama, Birmingham, "Tumor desmoplasia is a reservoir of growth factors and proteinase inhibitors", 1993

Medical College of Wisconsin, "A PCR analysis of clonality in early stages of cancer progressions", 1993

University of W. Virginia, "A strategy of clonality determination", 1992

Vanderbilt University, "Metalloproteinases and their inhibitors in tumor invasion", 1992

National Cancer Institute, "Germ cell tumors of the testis", 1992

Participation in organized symposiums and forums:

Invited speaker, the Blood Vessel Club, American Society for Investigative Pathology, Experimental Biology, April 25, 2010, Anaheim, CA

Chairman, Minisymposium on Cancer Biology and Cancer Therapeutics, American Society for Investigative Pathology, Experimental Biology 2009, April 22, 2009, New Orleans, LA

2008 Era of Hope Department of Defense Breast Cancer Research Program Meeting, June 2008, Philadelphia, PA.

Chair, American Society of Investigative Pathology Minisymposium, "Targeting tumor growth", San Diego, CA, 2008

Chair, American Society of Investigative Pathology Minisymposium, "Novel Therapeutic Advances in Cancer: a Peek into the Future", Washington DC, 2007

Speaker, International Symposium on Inflammatory Breast Cancer, Rabat, Morocco, 2007

Host and Guest Speaker, Update Course in Surgical Pathology, Department of Pathology, The Ohio State University, August, 2006

Host and Guest Speaker, Update Course in Surgical Pathology, Department of Pathology, The Ohio State University, August, 2005

Invited speaker, 2005 Era of Hope Department of Defense Breast Cancer Research Program Meeting, Philadelphia, PA.

Chairman, Minisymposium on "Oxidative Stress – Host Cytoprotection", American Society for Investigative Pathology, Experimental Biology 2004, April 18, 2004, Washington, D.C.

Visiting Professor, Department of Pathology, Weill Medical College of Cornell University, "Can academic anatomical pathology be helped by the digital age?" March 15-17, 2004

8th Annual Perspectives in Thoracic Cancer, New York, New York, October 17-18, 2003.

Speaker, California Breast Cancer Research Symposium, From Research to Action, A Decade of Progress, San Diego, CA, September 12-14, 2003.

Chairman, Minisymposium on "Cancer Invasion and Metastasis", American Society for Investigative Pathology, Experimental Biology 2003, April 11-15, San Diego, CA

Santa Barbara Breast Cancer Symposium, Santa Barbara, CA, "Of Mice, Macrophages and Mammary Glands", 2003
2002 Era of Hope DOD Breast Cancer Research Program Meeting, Orlando, Fl, September 25-28, 2002

7th Annual Multidisciplinary Symposium on Breast Disease, The University of Florida, Amelia Island, Florida, February, 2002.

Santa Barbara Breast Cancer Symposium, Santa Barbara, CA, 2001

6th Annual Perspectives in Thoracic Cancer, New York, New York, October 26-27, 2001.

Susan Komen Symposium on Breast Cancer, Washington, D.C., September, 2001

6th Annual Multidisciplinary Symposium on Breast Disease, The University of Florida, Amelia Island, Florida, February, 2001.

5th Annual Perspectives in Thoracic Cancer, Charleston, SC, October 20-21, 2000.

Susan Komen Symposium on Breast Cancer, Washington, D.C., September, 2000

2000 World Congress on In Vitro Biology, San Diego, CA, 2000

The Lustgarten Foundation for Pancreatic Cancer Research, Cold Spring Harbor, Long Island, New York, 2000

International Symposium on DCIS, London, England, 1999

UCLA/Keystone Symposium of Tumor Progression, Colorado, 1998

Lake Arrowhead, CA, ACCESS Retreat, Symposiums, 1998, 1999.

ALCASE (Lung Cancer) Symposium, Boston, MA, 1998

DOD Annual Breast Cancer Symposium, Washington, D.C., 1998

UCLA/Keystone Symposium on Angiogenesis, Colorado, 1997

Gordon Research Conference, New Hampshire, Mechanisms of Metastasis, 1997

Gordon Research Conference, New Hampshire, Mechanisms of Tumor Progression, 1996

Tumor Markers for Prognosis, Snowmass/Aspen, Colorado, 1996

49th Cancer Symposium, The Society of Surgical Oncology (SSO), Atlanta, GA, 1996

New Frontiers in Cancer Research, USC School of Medicine, Los Angeles, CA, 1996

Gordon Research Conference, Epigenetic Regulation of the Metastatic Process, New Hampshire, 1995

International Breast Cancer Study Group, St. Gallen, Switzerland, 1995
International College of Surgeons, Annual Meeting, San Diego, CA, 1995

Radiation Therapy Oncology Group, Philadelphia, PA, 1995

Molecular Biology in Diagnostic and Prognostic Pathology, San Francisco, CA, 1995

University of California/Tobacco Related Disease Research Program, Principal Investigators' Symposium, San Francisco, CA, 1993-1996

Ludwig Institute for Cancer Research, Breast Meeting, New York, NY, 1994

University of Southern California Physicians Forum, Los Angeles, CA, 1993

National Institutes of Health/Recombinant DNA Advisory Committee, Bethesda, MD, 1995

National Institutes of Health/Annual SPORE Meeting, Bethesda, MD, 1994

Society for Basic Urologic Research, Annual Meeting, Stanford University, Palo Alto, CA, 1994

"Cancer Treatment - Biological Mechanisms, University of Washington and Swedish Hospital, Seattle, WA, 1993

National Institute of Health, Conference on Micrometastasis in Cancer, Bethesda, MD, 1994

"Breast Cancer Management", University of California, Phoenix, AZ, 1993

"Practical Breast Cancer Management", University of Southern California, Los Angeles, CA, 1992

"Diagnostic Cytopathology" sponsored by University of California, Irvine, CA, 1992

PUBLIC (LAY) MEDIA EXPOSURE OF RESEARCH

2010 – **Barsky SH**: Front Page Lead Story: “Hopes Soar for Research Center” Reno Gazette-Journal, Tuesday, August 17, 2010.

2008 – **Barsky SH**: 1 of 6 abstracts selected out of several thousand by the Department of Defense and the 2008 Era of Hope Breast Cancer Meeting as most highly significant to be featured in a national press release. Work relates to ectopic cancer-initiating and cancer-promoting stem cells in breast cancer and the stem cell signature of inflammatory breast cancer

2008 – **Barsky SH**: Oral platform presentation at the 2008 ASCO Meeting on cancer stem cells arising in organ transplant recipients was featured in a full length story in the *Economist*, June 2008

2006 – **Barsky SH**: Interview with MAMM magazine about inflammatory breast cancer

2006 - **Barsky SH**: Local and national television interview about inflammatory breast cancer

2006 - **Barsky SH**: Local press and television interview on bronchioloalveolar lung cancer and the Joan's legacy foundation

2006 - **Barsky SH**: Research on myoepithelial cells, intraductal gene therapy and inflammatory breast cancer mentioned prominently in Dr. Susan Love's Breast Book, 4th Edition, Addison-Wesley Publishing Co., New York, 2006

2004 – **Barsky SH**: Announcement of Senhauser Endowed Chair and Chairman of Pathology position at Ohio State

2000 - **Barsky SH**: Research on myoepithelial cells, intraductal gene therapy and inflammatory breast cancer mentioned prominently in Dr. Susan Love's Breast Book, 3rd Edition, Addison-Wesley Publishing Co., New York, 2000

1998-**Barsky SH**, Roth MD, Kleerup EC, Simmons M and Tashkin DP. Histopathologic and molecular alterations in bronchial epithelium in habitual smokers of marijuana, cocaine and/or tobacco. *J Natl Cancer Inst*, 90:1198-1205, 1998

August 18-19, 1998

News of our finding appeared in the Wall Street Journal, USA

Today, CNN Headline News, CNN newswire/website, the Howard Stern radio show, CBS network news radio, ABC network news radio, the LA Times, KTTV-TV (Fox), KABC-TV, San Diego Union Tribune, Ventura County Star, KNX-AM, KFWB-AM, KPBS radio in San Diego, Inland Valley Daily Bulletin newspaper, Associated Press print newswire, Associated Press radio news service, Reuters news service, City News Service, various internet services including Yahoo, MS-NBC and CNN, and numerous daily newspapers throughout the U.S. and Canada, the UCLA Daily Bruin and UCLA Medicine

1997-Sternlicht M, Kedeshian P, Shao ZM, Safarians S, **Barsky SH**.

The human myoepithelial cell is a natural tumor suppressor.

Clin Cancer Res 3: 1949-1958, 1997

November 17, 1997

News of our finding appeared in the Outlook, KCAL TV, the Daily Bruin and CNN Headline News.

1996- Love SM and **Barsky SH**. Breast-duct endoscopy to study stages of cancerous breast disease. *Lancet* 348: 997-999, 1996.

October 15, 1996

News of our finding appeared in KCAL TV, KABC TV, KTTV-TV (Fox), KNBC, various wire newservices, the Daily Bruin, the Outlook and the LA Times

BIBLIOGRAPHY

Abstracts and Presentations

1. **Barsky SH.** Parathyroid hormone (PTH) receptor in renal cortex. *Texas Reports on Biology and Medicine*. 1974.
2. **Barsky SH.** Aortic infarction following dissecting aortic aneurysm. *Lab Invest*, March 1979.
3. **Barsky SH**, Geer D, Noe J, and Rosen S. The nature and evolution of port wine stains. *Lab Invest*, March 1979.
4. Finley J, **Barsky SH**, Noe J, and Rosen S. The response of port wine stains to argon laser therapy. *Lab Invest*, March 1981.
5. **Barsky SH**, Linnoila I, Triche T, and Costa J. Hepatocellular carcinoma with carcinoid components. *Lab Invest*, March 1981.
6. **Barsky SH**, Siegal GP, Jannotta F, and Liotta LA. Loss of basement membrane components by invasive tumors but not by their benign counterparts. *Lab Invest*, February 1982.
7. Reichert CM, Claysmith AP, Costa JC, **Barsky SH**, Liotta LA, and Enzinger FM. Pathology of pachydermodactyly: A variant of knuckle pad disease. *Lab Invest*, 46: 68A, 1982.
8. **Barsky SH**, and Liotta LA. Degradation of basement membranes by invasive breast tumors. *Gordon Research Conference on Molecular Pathology*, Plymouth, New Hampshire, July 1981.
9. **Barsky SH**, Baker A, Siegal GP, and Liotta LA. Use of anti-basement membrane antibodies to distinguish blood vessel capillaries from lymphatic capillaries. *Lab Invest*, 46: 6A, 1983.
10. Modesti A, **Barsky SH**, Togo S, Liotta LA, and Triche TJ. Ultrastructural and biochemical observations on type V collagen in normal and neoplastic mammary gland. *67th Annual Meeting of the Federation of American Societies for Experimental Biology (FASEB)*, Chicago, Illinois, April 10-15, 1983.

Abstracts and Presentations (cont.)

11. Rao CN, **Barsky SH**, Terranova VP, and Liotta LA. Role of laminin receptor in tumor metastasis. *67th Annual Meeting of the Federation of American Societies for Experimental Biology (FASEB)*, Chicago, Illinois, April 10-15, 1983.
12. Liotta LA, Rao CN, and **Barsky SH**. Laminin receptor: Purification and histologic localization. *American Society for Cell Biology*, San Antonio, Texas, November 19 - December 3, 1983.
13. Triche TJ, Modesti A, **Barsky SH**, and Liotta LA. Ultrastructural and immunocytochemical observations of laminin, type IV and type V collagen in human amnion, normal and neoplastic breast tissue. *American Society for Cell Biology*, San Antonio, Texas, November 19 - December 3, 1983.
14. **Barsky SH**, Rao CN, and Liotta LA. Exposed laminin receptors in invasive breast carcinoma. *6th Annual San Antonio Breast Cancer Symposium*, San Antonio, Texas, November 4-5, 1983.
15. **Barsky SH**, Rao CN, and Liotta LA. Loss of basement membrane components with exposure of laminin receptors in invasive breast carcinoma. *Lab Invest* 50: 6A, 1984.
16. Hannah J, and **Barsky SH**. Extracellular hyaline bodies are basement membrane accumulations. *Lab Invest* 52: 8A, 1986.
17. Huang SJ, Bhuta S, and **Barsky SH**. Peripheral lung carcinomas are desmoplastic carcinomas and not scar tumors. *Lab Invest* 52: 11A, 1986.
18. **Barsky SH**, and Gopalakrishna R. Inhibiting the desmoplastic response in C57 BL/6 mice enhances tumor invasion and spontaneous metastasis of BL6 melanoma. *Proceedings of AACR* 27: 67, 1986.
19. **Barsky SH**, and Gopalakrishna R. The desmoplastic response in human (scirrhous) breast carcinoma is rich in inhibitors directed against carcinoma-derived metalloproteinases. *Federation Proceedings* 45: 945, 1986.

Abstracts and Presentations (cont.)

20. Gopalakrishna R, and **Barsky SH**. Ca^{2+} -dependent autoproteolysis converts calpain II to a more hydrophobic calpain I-like form. *Federation Proceedings* 45: 949, 1986.
21. Gopalakrishna R, **Barsky SH**, and Anderson W. Factors influencing chelator-stable, detergent-extractable tumor-promoter-induced membrane association of C-kinase. *Federation Proceedings* 45, Supplement 1986.
22. Migliozzi, JA, Grossman, DA, Bhuta S, and **Barsky SH**. Desmoplastic basal cell carcinomas posses unique basement membrane-degrading properties. *Lab Invest* 53; 7A, 1987.
23. Gopalakrishna R, and **Barsky SH**. High Ca^{2+} -dependently nuclear associated calpain activity in MCF-7 breast carcinoma cells. *Federation Proceedings* 46, 1987.
24. Gopalakrishna R, and **Barsky SH**. Tumor promoter induced membrane-bound protein kinase C - its influence on hematogenous metastasis. *Federation Proceedings* 46, 1987.
25. **Barsky SH**, and Gopalakrishna R. High content of metalloproteinase inhibitors in human cirrhotic liver may explain resistance of that site to metastasis. *Proceedings of AACR* 28, 1987.
26. Nelson L, Levy V, **Barsky SH**. Anti-angiogenesis activity of the desmoplastic response to tumor invasion. *Lab Invest* 54: 7A, 1988.
27. Nelson L, and **Barsky SH**. Tumor desmoplasia inhibits angiogenesis. *Proceedings of National Medical Fellowship Symposium*, 1988.
28. **Barsky SH** and Gopalakrishna R. Characterization of a myofibroblast growth factor from human breast carcinoma cell lines. *Federation Proceedings* 47, 1988.

Abstracts and Presentations (cont.)

29. **Barsky SH** and Gopalakrishna R. Isolation of a myofibroblast growth factor from human breast carcinoma lines: Role in the pathogenesis of the desmoplastic response to tumor invasion. *Proceedings of AACR* 29, 1988.
30. **Barsky SH**, and Gopalakrishna R. An experimental model of human tumor desmoplasia utilizing *c-Ha-ras* transfected MCF-7 cell lines. Evidence for a paracrine growth factor mechanism. *Lab Invest*, 1989.
31. Ross DA, Huaman JA, and **Barsky SH**. A study of the heterogeneity of the mucoepidermoid tumor and the implication for future therapies. *American Society for Head and Neck Surgery*, 1991.
32. Mirell C, Hu L, Sternlicht M, and **Barsky SH**. A novel strategy for the investigation of clonality in pre-tumoral disease states and early stages of tumor progression. *Lab Invest*, 1992.
33. Remotti H, Watson L, and **Barsky SH**. Mammary Paget's disease: Evidence for a multicentric polyclonal epithelial "field" neoplasm lacking true epithelial invasion. *Lab Invest*, 1992.
34. **Barsky SH**, Grossman D, Ho J, and Holmes EC. The multifocality of bronchioloalveolar lung carcinoma (BAC): Evidence and implications of a multiclonal origin. *Lab Invest*, 1992.
35. Hu L, Cheng L, and **Barsky SH**. Increased TIMP-1 activity, protein, and gene expression in human breast carcinoma desmoplasia. *FASEB Proceedings*, 1992.
36. **Barsky SH**, and Hu L. A recombinant MCF-7 xenograft paracrine model of breast carcinoma desmoplasia. *FASEB Proceedings*, 1992.
37. **Barsky SH**, Mirell C, Hu L, and Sternlicht, M. A heterogeneity-independent strategy for the investigation of clonal evolution in human tumoral disease states and experimental models of tumor progression. *Proceedings AACR*, 1992.

Abstracts and Presentations (cont.)

38. Belldegrun A, Tso CL, Sakata T, Duckett T, Brunda M, **Barsky SH** et al. In-vitro and in-vivo characterization of a human renal cell carcinoma line genetically engineered to secrete interleukin-2 or/and interferon-alpha: A novel strategy for the development of live cancer vaccines. *Proceedings AACR*, 1992.
39. Thompson L, Thompson P, Grossman D, and **Barsky SH**. Monoclonal origins of malignant mixed tumors (carcinosarcomas) and collision tumors: Evidence for a common histogenesis. *CAP Abstracts*, 1993.
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USPC Class: 382133 Class name: Applications biomedical applications cell analysis, classification, or counting Publication date: 2012-03-29 Patent application number: 20120076391
21. Abhijeet S. Gholap (San Jose, CA, US) Gauri A. Gholap (San Jose, CA, US) Chiruvolu V.k. Rao (Pune, IN) **Sanford H. Barsky** (Columbus, OH, US) Madhura Vipra (Pune, IN) Gurunath Kamble (Pune, IN) Suhas Manmantrao Path (Pune, IN) Prithviraj Jadhav (San Jose, CA, US) Patent application title: Method and System for Automated Detection of Immunohistochemical (IHC) Patterns Inventors: Assignees: Ventana Medical Systems, Inc., a Delaware Corporation IPC8 Class: AG06K900FI USPC Class: 382133 Class name: Applications biomedical applications cell analysis, classification, or counting Publication date: 2011-12-22 Patent application number: 20110311123
22. Abhijeet S. Gholap (San Jose, CA, US) Gauri A. Gholap (San Jose, CA, US) Prithviraj Jadhav (Kothrud, IN) **Sanford H. Barsky** (Columbus, OH, US) C. V. K. Rao (Kothrud, IN) Madhura Vipra (Kothrud, IN) Patent application title: METHOD FOR AUTOMATED PROCESSING OF DIGITAL IMAGES OF TISSUE MICRO-ARRAYS (TMA) Inventors: Assignees: Ventana Medical Systems, Inc. IPC8 Class: AG06K900FI USPC Class: 382133 Class name: Applications biomedical applications cell analysis, classification, or counting Publication date: 2012-04-19 Patent application number: 20120093387

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